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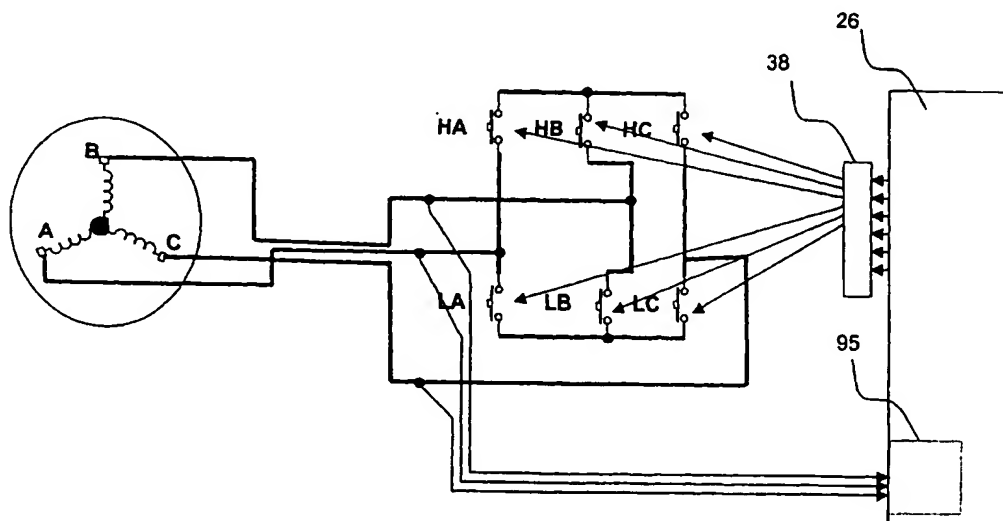
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(54) Title: **AN AIR ASSISTANCE APPARATUS PROVIDING FAST RISE AND FALL OF PRESSURE WITHIN ONE PATIENT'S BREATH**



(57) Abstract: The invention concerns an apparatus delivering air to this patient trough a mask, comprising an air blower (33) wherein the impeller (5) is rotated by an electro motor comprising a rotor (3) and a stator (8), said stator having at least three sectors (8a, 8b and 8c), the rotation of the rotor being enabled by changes of the polarity of the sectors, each sectors polarity configuration constituting one step of the rotor's rotation, said apparatus comprising a driving unit (36) changing the sectors polarity when the rotor is at his optimal position, so that the efficiency of the electro motor enables the blower to have fast accelerations and I decelerations within one patient's breath step, said breath step consisting of one inspiration and one expiration.

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